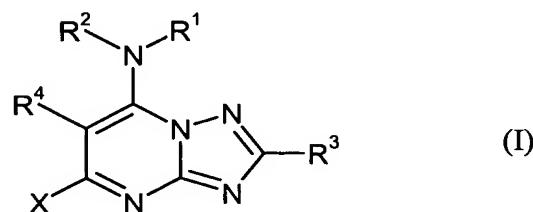


Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) **Triazolo[4,3-d]pyrimidines A compound** of the formula



in which

R¹ represents optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, or optionally substituted heterocyclyl,

R² represents hydrogen or alkyl, or

R¹ and R² together with the said nitrogen atom to which they are bound, represent a optionally an optionally substituted heterocyclic ring,

R³ represents halogen, optionally substituted alkyl, or optionally substituted cycloalkyl,

R⁴ represents optionally substituted heterocyclyl, and

X represents halogen.

2. (Currently amended) **Triazolo[4,3-d]pyrimidines of the formula (I) according to The compound of Claim 1, in which**

- R¹ represents alkyl having 1 to 6 carbon atoms, which may be substituted one to five times, identically or differently, by halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms and/or or cycloalkyl having 3 to 6 carbon atoms, or
- R¹ represents alkenyl having 2 to 6 carbon atoms, which may be substituted one to three times, identically or differently by halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms and/or or cycloalkyl having 3 to 6 carbon atoms, or
- R¹ represents alkynyl having 2 to 6 carbon atoms, which may be substituted one to three times, identically or differently by halogen, cyano, alkoxy having 1 to 4 carbon atoms and/or or cycloalkyl having 3 to 6 carbon atoms, or
- R¹ represents cycloalkyl having 2 to 6 carbon atoms, which may be substituted one to three times, identically or differently by halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms and/or or alkyl having 1 to 4 carbon atoms, or
- R¹ represents saturated or unsaturated heterocyclyl having 5 or 6 ring members and 1 to 3 heteroatoms, such as selected from the group consisting of nitrogen, oxygen, and/or and sulphur, the said heterocyclyl able to be optionally substituted once or twice by halogen, alkyl having 1 to 4 carbon atoms, cyano, nitro and/or cycloalkyl having 3 to 6 carbon atoms,
- R² represents hydrogen or alkyl having 1 to 4 carbon atoms, or

R¹ and R² together with the said nitrogen atom to which they are bound, represent a saturated or unsaturated heterocyclic ring having 3 to 6 ring elements, the said heterocyclic compound able to contain optionally containing a further nitrogen, oxygen, or sulphur atom as a ring element and the heterocyclic compound able to be optionally substituted up to three times by fluorine, chlorine, bromine, nitro, alkyl having 1 to 4 carbon atoms and/or halogenalkyl having 1 to 4 carbon atoms and 1 to 9 fluorine and/or chlorine atoms,

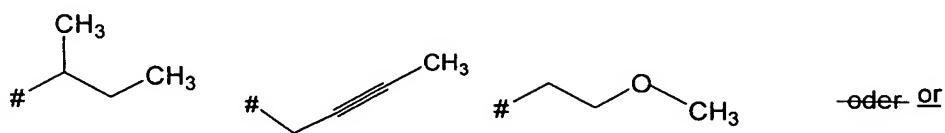
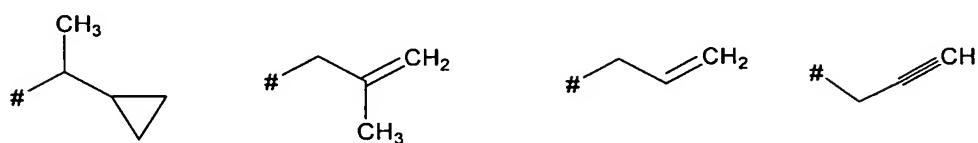
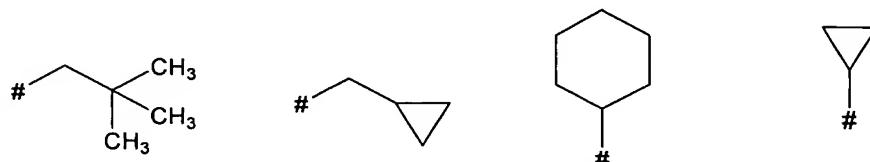
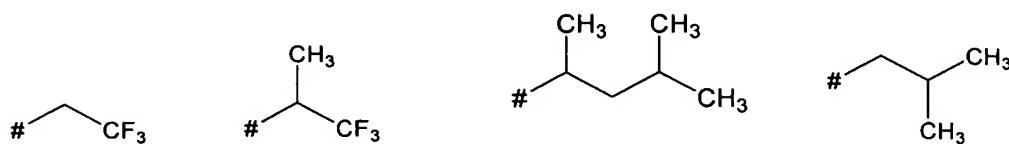
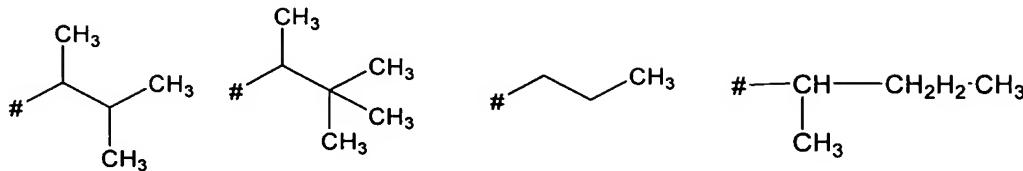
R³ represents fluorine, chlorine, bromine, iodine, alkyl having 1 to 4 carbon atoms, halogenalkyl having 1 to 4 carbon atoms and 1 to 9 halogen atoms or cycloalkyl having 3 to 6 carbon atoms,

R⁴ represents saturated or unsaturated heterocyclyl having 5 or 6 ring members and 1 to 4 heteroatoms, such as selected from the group consisting of oxygen, nitrogen and/or and sulphur, the said heterocyclyl being able to be optionally substituted one to four times, identically or differently by fluorine, chlorine, bromine, cyano, nitro, alkyl, alkoxy, hydroximinoalkyl or alkoximinoalkyl each having 1 to 3 carbon atoms in each alkyl part, halogenalkyl or halogenalkoxy each having 1 to 3 carbon atoms and 1 to 7 halogen atoms, and

X represents fluorine, chlorine, bromine or iodine.

3. (Currently amended) Triazolo[4,3-d]pyrimidines of the formula (I) according to The compound of Claim 1 or 2, in which

R¹ represents a residue of the formula



steht, wherein

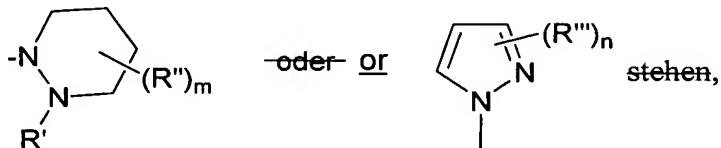
(Key: oder = or
— steht = represents)

marking marks the linkage point,

R² represents hydrogen, methyl, ethyl or n-propyl, or

R¹ and R² together with the nitrogen atom, to which they are bound, represent pyrrolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, piperazinyl, 3,6-dihydro-1(2H)-piperidinyl or tetrahydro-1(2H)-pyridazinyl, these said residues being able to be optionally substituted by 1 to 3 fluorine atoms, 1 to 3 methyl groups and/or trifluoromethyl, or

R¹ and R² together with the nitrogen atom, to which they are bound, represent a residue of the formula



(Key: oder = or)

in which

R' represents hydrogen or methyl,

R'' represents methyl, ethyl, fluorine, chlorine or trifluoromethyl,

m represents the numbers 0, 1, 2 or 3, R'' representing identical or different residues if m represents 2 or 3,

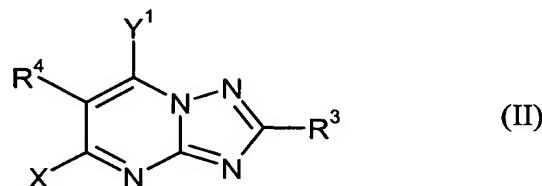
R''' represents methyl, ethyl, fluorine, chlorine or trifluoromethyl and,

n represents the numbers 0, 1, 2 or 3, wherein R''' representing represents identical or different residues if n represents 2 or 3,

R³ represents fluorine, chlorine, bromine, iodine, methyl, ethyl, n-propyl, isopropyl, trifluoromethyl, 1-trifluoromethyl-2,2,2-trifluorethyl, heptafluoroisopropyl, cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl,

- R⁴ represents pyridyl, which is linked in the second or fourth position and may be substituted one to four times, identically or differently, by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and/or or trifluoromethyl, or
- R⁴ represents pyrimidyl-stein, which is linked in the second or fourth position and may be substituted one to three times, identically or differently, by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and/or or trifluoromethyl, or
- R⁴ represents thienyl, which is linked in the second or third position and may be substituted one to three times, identically or differently, by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and/or or trifluoromethyl, or
- R⁴ represents thiazolyl, which is linked in the second, fourth, or fifth position and may be substituted once or twice, identically or differently, by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and/or or trifluoromethyl, and
- X represents fluorine, chlorine or bromine.

4. (Currently amended) A method for producing triazolopyrimidines of the formula (I) according to one of Claims 1 through 3, characterized in that of preparing a compound of Claim 1, comprising
(a) dihalogen triazolopyrimidines contacting one or more compounds of the formula



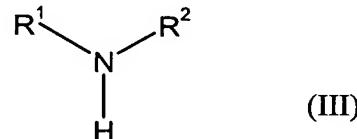
in which

R³, R⁴ and X have the meanings specified in one of Claims 1 through 3 Claim 1

and

Y¹ represents halogen,

are reacted with amines with one or more compounds of the formula



in which

R¹ and R² have the meanings specified in one of Claims 1 through 3 Claim 1, optionally in the presence of a diluent, optionally in the presence of an acid acceptor, and optionally in the presence of a catalyst wherein a compound of Claim 1 is prepared.

5. (Currently amended) Agents A composition for combating undesired micro-organisms, characterized by a content of comprising at least one triazolopyrimidine

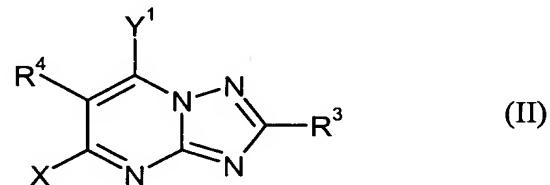
compound of the formula (I) according to one of Claims 1 through 3 of Claim 1, in addition to extenders and/or surfactants.

6. (Cancelled)

7. (Currently amended) A method for combating undesired micro-organisms, characterized in that triazolopyrimidines of the formula (I) according to one of Claims 1 through 3 are applied to the undesired comprising applying a composition comprising one or more compounds of Claim 1 to said micro-organisms and/or their living space.

8. (Currently amended) A method for producing agents for combating undesired micro-organisms, characterized in that triazolopyrimidines of the formula (I) according to one of Claims 1 through 3 are mixed preparing the composition of Claim 5 comprising contacting one or more said compounds with extenders and/or surfactants.

9. (Currently amended) Dihalogen triazolopyrimidines A compound of the formula



in which

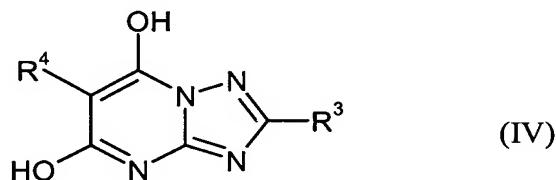
R³ represents halogen, optionally substituted alkyl or optionally substituted cycloalkyl,

R⁴ represents optionally substituted heterocyclyl,

X represents halogen, and

Y¹ represents halogen.

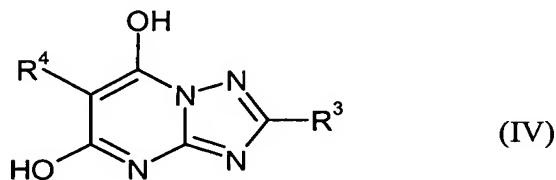
10. (Currently amended) A method for producing ~~dihalogen triazolo pyrimidines triazolo pyrimidines of the formula (II) according to Claim 9, characterized in that preparing a compound of Claim 9, comprising contacting one or more compounds~~
~~(b) dihydroxy triazolo pyrimidines of the formula~~



in which

- R³ and R⁴ which have the meanings specified in ~~Claim 7~~ Claim 9,
are reacted with halogenation agents, optionally in the presence of a diluent
wherein a compound of Claim 9 is prepared.

11. (Currently amended) Dihydroxy triazolo pyrimidines A compound of the formula



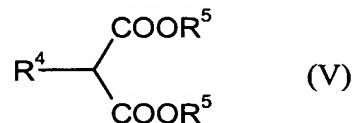
in which

R³ represents halogen, optionally substituted alkyl or optionally substituted cycloalkyl, and

R⁴ represents optionally substituted heterocyclyl.

12. (Currently amended) A method for producing ~~dihydroxy triazolo pyrimidines of the formula (IV) according to Claim 11, characterized in that preparing a compound of~~ Claim 11, comprising contacting one or more compounds

(e) — heterocyclyl malonic esters of the formula

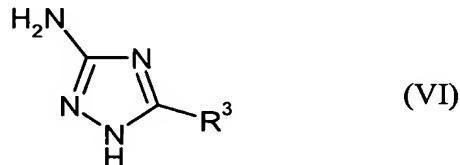


in which

R⁴ has the meanings meaning specified in ~~Claim 9~~ Claim 11 and

R⁵ represents alkyl having 1 to 4 carbon atoms,

~~are reacted with aminotriazoles one or more compounds~~ of the formula



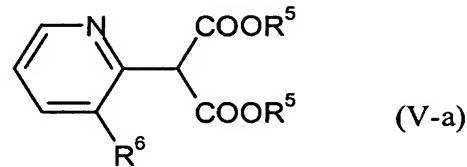
in which

R³ has the meaning specified in ~~Claim 9~~ Claim 11,

optionally in the presence of a diluent and optionally in the presence of an acid

binder wherein a compound of Claim 11 is prepared.

13. (Currently amended) Pyridyl malonic esters A compound of the formula



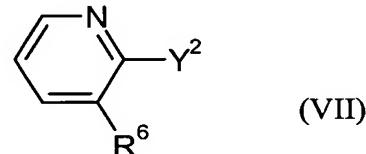
in which

R^5 represents alkyl having 1 to 4 carbon atoms and

R^6 represents halogen or halogenalkyl.

14. (Currently amended) A method for ~~producing~~ pyridyl malonic esters of the formula (V-a) according to Claim 13, characterized in that preparing a compound of Claim 13, comprising contacting one or more compounds

(d) — ~~halopyridines~~ of the formula

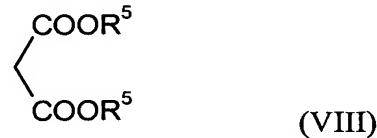


in which

R^6 has the meaning specified in ~~Claim 11~~ Claim 13 and

Y^2 represents halogen,

~~are reacted with malonic esters~~ one or more compounds of the formula



in which

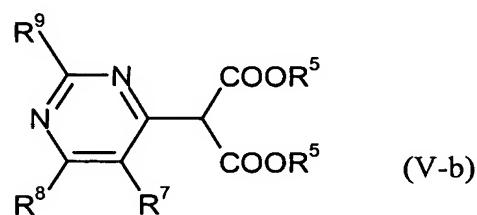
R^5 has the meaning specified in ~~Claim 11~~ Claim 13,

optionally in the presence of a diluent, optionally in the presence of a copper salt,

and optionally in the presence of an acid acceptor wherein a compound of

Claim 13 is prepared.

15. (Currently amended) Pyrimidyl malonic esters A compound of the formula



in which

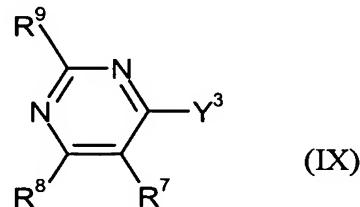
R⁵ represents alkyl having 1 to 4 carbon atoms,

R⁷ represents halogen or halogenalkyl, and

R⁸ and R⁹ independently of one another, represent hydrogen, fluorine, chlorine, bromine, methyl, ethyl or methoxy.

16. (Currently amended) A method for producing pyrimidyl malonic esters of the formula (V-b) according to Claim 15, characterized in that preparing a compound of
Claim 15, comprising contacting one ore more compounds

(e) — halopyrimidines of the formula

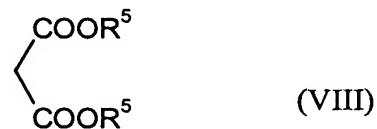


in which

R⁷, R⁸ and R⁹ have the meanings specified in Claim 13 Claim 15 and

Y^3 represents halogen,

~~are reacted with malonic esters one or more compounds of the formula~~



in which

R^5 has the meaning specified in ~~Claim 13~~ Claim 15,

optionally in the presence of a diluent, optionally in the presence of a copper

solid, and optionally in the presence of an acid acceptor wherein a compound of

Claim 15 is prepared.